

### Geography of India

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#### **GEOGRAPHY**

#### ***Textual questions and answers Exercise***

Q.1: Write about the geographical location of India.

Ans: India is situated in the southern part of the continent of Asia. The country is surrounded by the Himalayas and China in the north, the Indian ocean and Sri Lanka in the south, the Bay of Bengal and Myanmar in the east and the Arabian Sea and Pakistani in the West. It extends from Kashmir in the north to Cape Comorin in the south and from Arunachal Pradesh in the east to Saurashtra in the West. India lies between  $8^{\circ}4'28''\text{N}$  and  $37^{\circ}17'53''\text{N}$  lines of latitudes and  $68^{\circ}7'33''\text{E}$  and  $97^{\circ}24'47''$  lines of longitudes. The Tropic of Cancer ( $23^{\circ}30'\text{N}$ ) divides the country into northern and southern halves.

The northern part lies in the temperate climate zone while the southern part falls under tropical zone. The north-south length of India is 3,214 km while the east-west length is about 2,933 km. It has a total coastline of 6,100 km while its landline boundary length is over 15,200 km. It shares a common boundary with Pakistan, China, Nepal, Bhutan, Myanmar and

Bangladesh. The total geographical area of India is 3,287,263 million sq km which makes it the seventh largest country in the world. The country is referred to as subcontinent because of its large size and vast extension. India's share in the total land area of the world is only 2.2%. Today, India consists of 29 states and 7 union territories.

**Q.2: What is the total length of Indian coastlines ?**

Ans: The total length of Indian coastline is about 6,100km.

**Q.3: What is the total length of the land boundaries of India ?**

Ans: The total length of the land boundaries of India is 15,200km.

**Q.4: Write a short note on Indian landmass.**

Ans: Indian physiography is composed of diversified landforms, viz. mountains, hills, plateaus, plains, etc.

(i) Mountains and hills : The mountains cover 10.7% and the hills and hillocks cover 18.6% of the total area of the country. The Himalayan mountain system extends over the entire north and north-eastern boundary of the country. The mountain system consists of high mountains peaks, glaciers, steep gorges, waterfalls, etc. Moreover, the Aravallis, Vindhya, Satpura, Mahadev and

Mahakal ranges and the Eastern and Western Ghats, etc. are found in southern India.

(ii) Plateaus: The plateaus cover 27.7% the area of the country. The Deccan plateau extends extensively over southern India.

(iii) Plains: The plains cover 43.3% of the area of the country. Vast fertile plains are created by the rivers, viz. Ganga, Brahmaputra and Indus. The plains created by these rivers include western plain, Punjab-Haryana plain, Ganga plains, north Bengal plain and Brahmaputra plain. Besides, narrow coastal plains are also seen in the eastern and western coasts of India.

(iv) Rivers: India is regarded as the land of rivers. The major rivers of the northern India are the Ganga and the Brahmaputra. Narmada, Tapti, Mahanadi, Godavari, Krishna and Kaveri are some of the South Indian rivers.

(v) Lakes: The main lakes found in India are Wular (Kashmir), Pushkar and Sambhar (Rajputana), Chilka (Orissa), Kolar and Pulicat (Tamil Nadu) and Loktak (Manipur).

**Q.5: Write down four points of differences between the north and the south Indian rivers.**

**Ans:** The differences between the north and the south Indian rivers are :

Sl. No.	Basis of difference	North Indian rivers	South Indian rivers
(i)	Flow of water	Originate in the snow-covered high mountains and hence their water flows throughout the year.	Originate from the mountains and plateaus of comparatively low height and they dry out during winter.
(ii)	Distinct courses of river	The three courses of a river – upper, middle and lower course are distinctly seen.	The three courses of a river are not so distinct.
(iii)	Navigability	Navigable as their valleys are wide and have a long course in the plains.	Not navigable as their valleys are narrow and they are flowing rapidly.
(iv)	Floodplains	Rivers are young in age and they change their channels frequently, so they have wide floodplains.	Rivers are old and they do not change their channels frequently. Hence their floodplains are also narrow.
(v)	Hydropower generation	Not suitable for hydropower generation (except in their upper reaches) as they are not swift-flowing rivers and carry high sediment load.	Highly suitable for hydropower generation as they are swift flowing rivers and carry less amount of sediment load.
(vi)	Population density around the river valleys	Densely populated as their valleys are quite fertile.	Sparsely populated as their valleys are less fertile.

Sl. No.	Basis of Difference	North Indian rivers	South Indian rivers
(vii)	Number of cities on the banks	Many cities have grown up on their banks because of their navigability.	Not many cities have come up on their banks as they are not so navigable.
(viii)	Delta	Large deltas are formed at their mouth.	Few and small deltas are formed at their mouth.

[Note: Here we have provided eight points of differences. You can write only as many as asked for in the question.]

### Q.6: What are the physiographic divisions of India ?

Ans: India is marked by several physiographic diversities. The physiography of India consists of mountains, hills, river valleys, plains, plateaus, etc. About

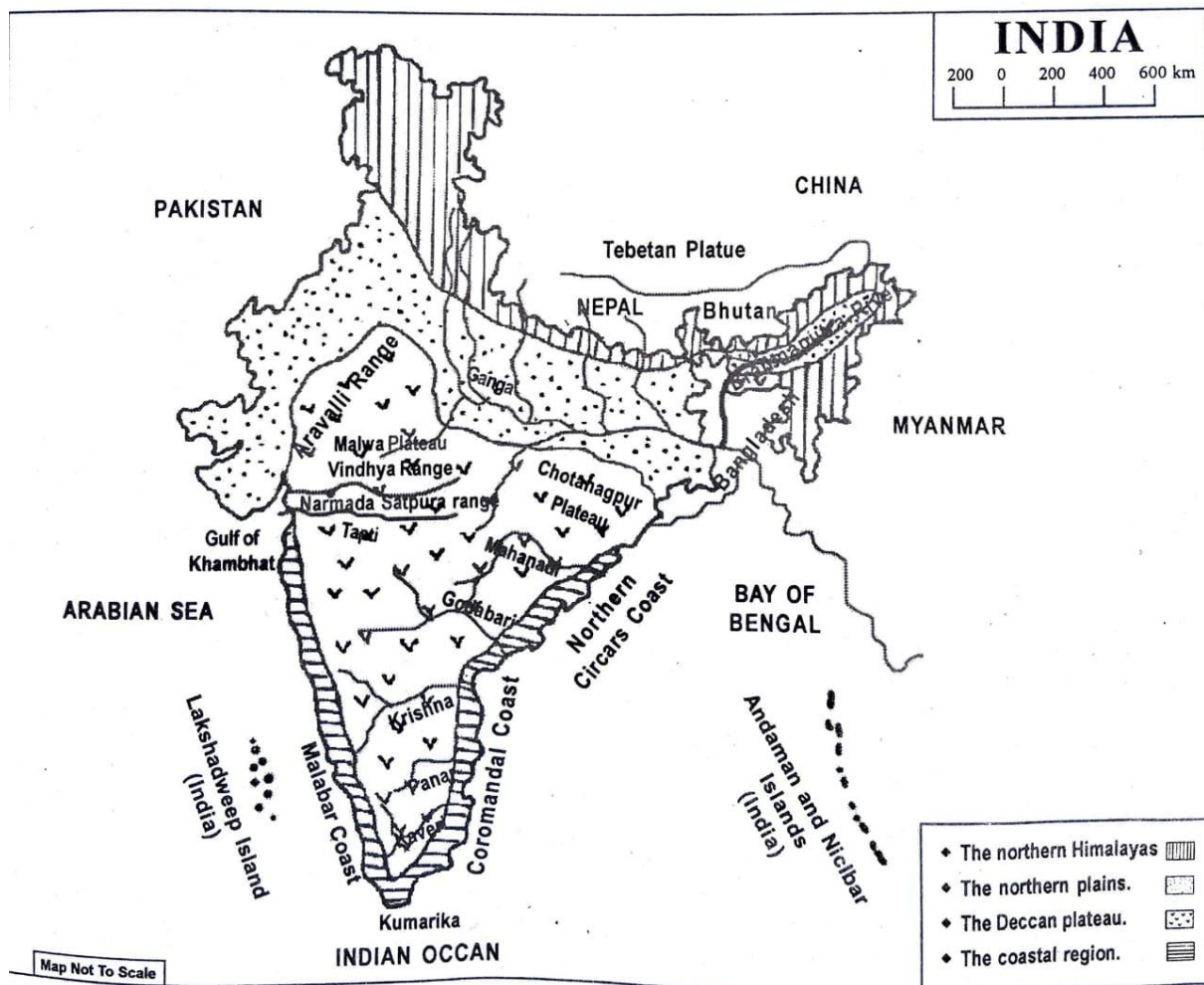
10.7% of India's total land area is covered by mountains, 18.6% by hills and hillocks, 27.7% by plateaus and 43.3% by plains. On the basis of physiographic characteristics and structure, India can be divided into four main divisions :

(i) The northern Himalayas.

(ii) The northern plains.

(iii) The Deccan plateau.

(iv) The coastal region. Besides, the two island groups the Lakshwadeep islands and the Andaman and Nicobar islands form an essential physiographic division of India.



### Q.7: What are the characteristics of the Northern Himalayan mountain region of India ?

Ans: The Himalayas are the highest mountain ranges of the world. The Himalayan region of India lies in the northern part of India and it extends from Nanga Parbat in Kashmir to Arunachal Pradesh in the east covering a distance of 2,500 km. It has an average width of 240km to 500km. The total geographical area of the Himalayan region is around 5,00,000 sq.km. Its height from the sea level is more than 8,000 m on an average. The Himalayas were formed during the Tertiary period and are a result of nearly 7million years of mountain building process. The Himalayas consist of three parallel ranges

running from east to west, namely the higher Himalayas, the Lesser Himalayas and the Outer Himalayas in the east-west direction. Among these three ranges, the Higher Himalayas have an average height of about 6,000m. These steep ranges slope towards north and merge with the Tibetan plateau of China. Just to the south of the higher Himalayas stands the Lesser Himalayas whose average height is 4,000m. Its width varies from 60 to 80km. The ranges adjacent to the Lesser Himalayas are the Outer Himalayas, also known as Siwaliks. The average height of these ranges is 1,000m. These ranges decrease southwards and merge with the Ganga-Brahmaputra plains. They cover the foothill regions and have an average width of 15km to 50km. Moreover, the eastern and southern parts of the north-eastern regions are included in the Himalayan region as they are covered with hills and mountain ranges.

#### Q.8: Describe the characteristics of the North Indian plain.

Ans: The North Indian plain covers a total area of about 7,00,000 sq.km. It lies between the Himalayas in the north and the Deccan Plateau in the south. It extends from Assam in the east to the Indo-Pakistan border in the West with a length of 2,400km. This vast plain is known as Indo-Ganga-Brahmaputra plain. The width of Indo-Ganga plain ranges from 240km to 320km and the average width of Brahmaputra plain is 80km. The northern plain can be divided into five parts:

(a) Western plain: Created by the river Tapti.

(b) Punjab-Haryana : Created by the rivers Sutla, Beas and Ravi.

(c) Ganga plain: Created by the rivers Ganga and Jamuna and covers the plain areas of Uttar Pradesh, Bihar and West Bengal.

(d) North Bengal plain: Created by the Northern Himalayas.

(e) Brahmaputra plain: created by the Brahmaputra and its tributaries. The three main rivers, viz. the Indus, the Ganga and the Brahmaputra with their innumerable tributaries together created this vast plain. Among these rivers, the most important river is the Ganga which originated from the Gangotri glacier of the higher Himalayas while the river Brahmaputra originated from a glacier called Chema-yu-Dung located in the Tioetan plateau of China. The most important tributaries of the Ganga are Alakananda, Jumuna, Ram Ganga, Gomti, Ghagra, Gandak, Son, Koshi, etc. while the main tributaries of the Brahmaputra in the North bank are Subansiri, Jia-Bharali, Dhansiri (north), Puthimari, Pagladia, Manas, Champabati, etc. and in the south bank are Burhi Dihing, Disang, Dhansiri (south), Dikhow, Kapili, Champabati, etc. The important tributaries of Indus are Sultaj, Beas and Ravi rivers. Towards the west of the central plain, there lies the dry, sandy and desertic plains of Rajasthan which includes a part of the

Thar desert. The entire North Indian plain is very fertile and highly suitable for agriculture. Hence, this North Indian region is thickly populated.

**Q.9: Describe the characteristics of the Deccan Plateau.**

Ans: The Deccan plateau is situated to the south of the North Indian plain. This plateau mostly consists of old hard rocks and is triangular in shape. The Vindhya, Satpura, Mahadev and Mahakal mountain ranges divide the whole region into northern and southern parts. The northern part is less extensive and includes Malwa plateau, Chotanagpur plateau and Vindhya mountains. The southern part is quite extensive and extends from the Satpura, Mahadev and Mahakal mountains to Cape Comorin. The plateau is surrounded by the eastern ghats and western ghats in the east and west respectively. The Deccan plateau on the whole slopes towards the east and so most of the rivers of this region such as Mahanadi, Godavari, Krishna, Pennar and Kaveri flow eastwards into the Bay of Bengal while Narmada and Tapti flow towards west and empty themselves in the Gulf of Cambay (Khambhat) as the region lying between the Satpura and Vindhya mountains has its slope from east to west.

**Q.10: Mention the characteristics of the Coastal Region of India.**

Ans: There is a strip of coastal region situated on the eastern and western coasts of India. The narrow strip of flat land lying between the western Ghats and Arabian

sea is known as the Western coastal plain. This narrow land extends from the Gulf of Combay in the north to cape Comorin in the south. The coast is long having a length of 1500km and width ranging between 10km and 15km. Its northern part from Mumbai to Mangalore is called Konkan Coast while the southern part from Mangalore to cape Comorin is known as Malabar Coast. The area lying between the Eastern ghats and the Bay of Bengal is known as the Eastern Coastal plain, which extends from the mouth of the Godavari river to cape Comorin is called Coromandal coast. The coast is long and has a height between 30m and 50m from the mean sea level. It is 1100km long with an average width of 120km. The northern part extending from the mouth of the Ganges river to that of the Godavari river is known as Northern Circars. The eastern coastal region is watered by rivers such as Godavari, Mahanadi, Krishna and Kaveri. The area is more fertile than western coastal plains as these rivers create deltas in the region.

**Q.11: Write down the characteristics of the climate of India.**

**Ans:** The climate of India is greatly influenced by various factors such as the size of the country, distance from the equator, nearness to the sea, differences in elevation, natural vegetation, winds, etc. The climatic conditions of India are characterised by the following features:

(i) Varied climate: India is a very vast country with varied physiographic features such as mountains, hills, river valleys, plains, plateaus, coastal regions, etc. India has

snow-capped mountainous regions, regions with desert conditions, places receiving very high amount of rain, etc. Thus, India is marked by various types of climate.

(ii) Different climate situation between north and south: The Tropic of Cancer divides the country into northern and southern parts. The northern part falls in the temperate climate zone while the southern part has tropical climate. Hence, the southern part of India is relatively warmer than the northern part.

(iii) Difference in altitude: Different places in India are situated at different levels from the sea level. Since altitude greatly influence the climate of a place. Agra and Darjeeling enjoy different types of climate although both are located on the same latitude.

(iv) Effect of monsoon: India gets most of its rains due to the south-west monsoon winds that blow from the Arabian sea during summer. These are moisture laden winds and so they bring heavy rainfall to most parts of India. In winter, north-east monsoon winds bring rain to some parts of India.

(v) Effect of Himalayas : The climate of India is greatly influenced by the presence of the Himalayas on the northern side. The Himalayas block the cold winds from Central Asia which has insulated India from the extreme cold weather.

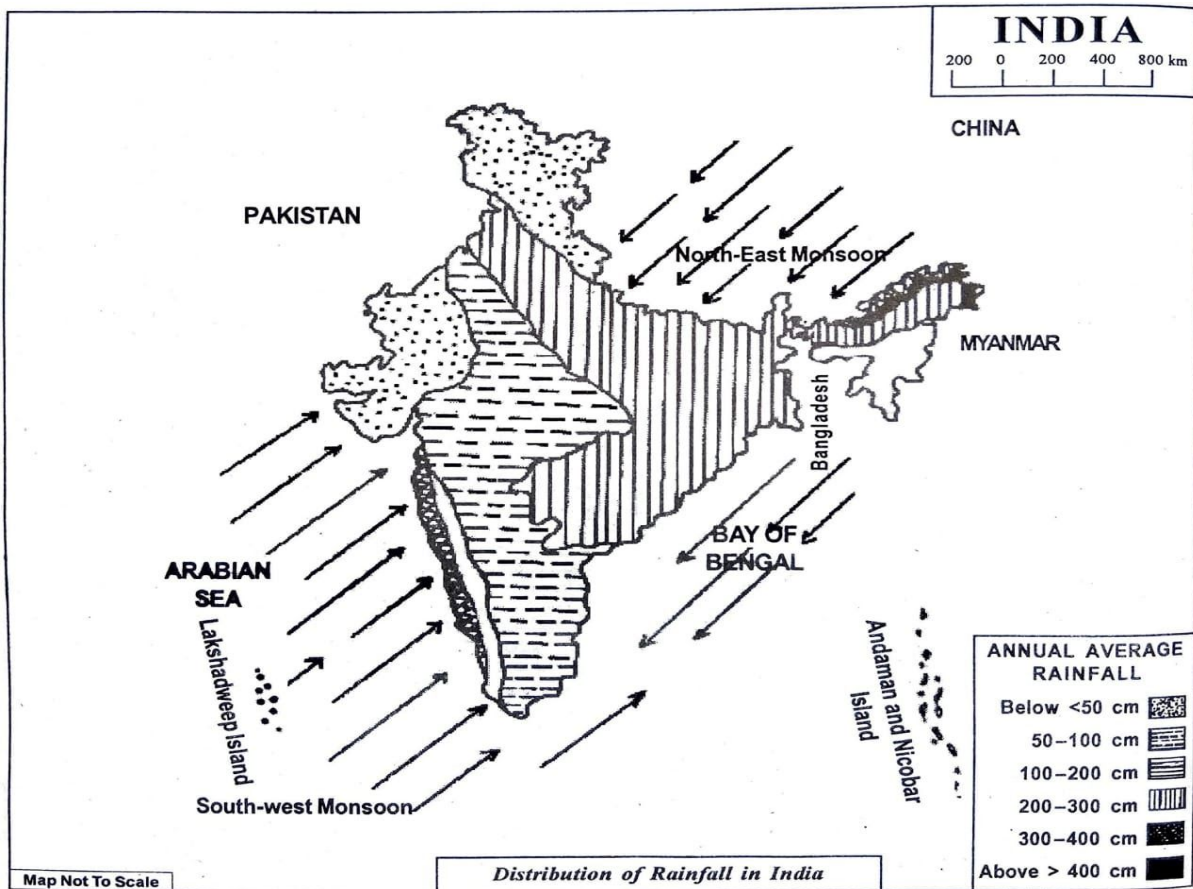
(iv) Nearness to sea: A place situated near the sea has a mild summer and moderate winter and vice versa.

This is the main reason for the pleasant climate of Mumbai.

**Q.12: Write a note on the impact of monsoons in India .**

Ans:. One of the unique features of the climate of India is the influence of the monsoons in India. In fact, it is considered to be the most significant factor that determines the climatic conditions of India. The monsoon winds named south-west monsoon winds bring rain to India during summer. These winds from the Arabian sea move towards the Indian subcontinent during summer. Since they blow over the oceans, they carry enormous amount of moisture. As their flow is blocked by the western ghats situated on the western side of the country, these winds rise up, condense and then fall down as rain in the areas facing the western coast. That is why, the Konkan and then Malabar coasts receive over 300 cm of rainfall annually.

After crossing the western ghats, these winds blow over the Bay of Bengal and then move towards Assam and the north-east. Since there are no mountain ranges here, these winds come directly to the Meghalaya plateau which force them to rise up and condense. As a result, this region gets heavy rainfall during summer. The Cherrapunji region of Meghalaya gets the highest rainfall in the world (1250 cm of rainfall annually). Thereafter, the winds cross the Meghalaya plateau and enter Assam bringing huge amount of rain to the plains of Assam and its neighbouring states.



Thereafter, these winds move further north and get obstructed by the foothills of the Himalayas. Therefore, this region too gets abundant rain. During winter, the north-east monsoon winds coming from Central Asia enter India through the mountain gaps of the Himalayan ranges. Since these winds come from the north-east direction, they are called the north-east monsoons. These winds are dry and cold as they come from Central Asia, they do not bring rain to North-eastern states. As these winds move towards south, they fly over the Bay of Bengal carrying in the process a bit of moisture which falls down as rain over the Coromandal coast.

**Q.13: Outline the pattern of rainfall distribution in India .**

Ans: The spatial distribution of rainfall in India is uneven. However, we many broadly divide India into four regions according to rainfall :

(i) Region of heavy rainfall: Here minimum rainfall is 300 cm. This includes Himalayan foothills of the North-eastern region, southern parts of the Meghalaya plateau and the western slopes of the western ghats. Along the Himalayan ranges of Arunachal Pradesh, there is a highest rainfall of 400 cm average.

(ii) Region of moderate rainfall : Here rainfall is between 100 to 200 cm. It includes northern plains of India including the Brahmaputra plains.

(iii) Region of low rainfall: Here rainfall is below 50 cm. It includes Thar desert, Kutch, and western Rajasthan. Sometimes the Thar desert receives rainfall of less than 20cm.

**Q.14: Write about the types of the vegetations of India.**

Ans: The different types of vegetations found in India are:

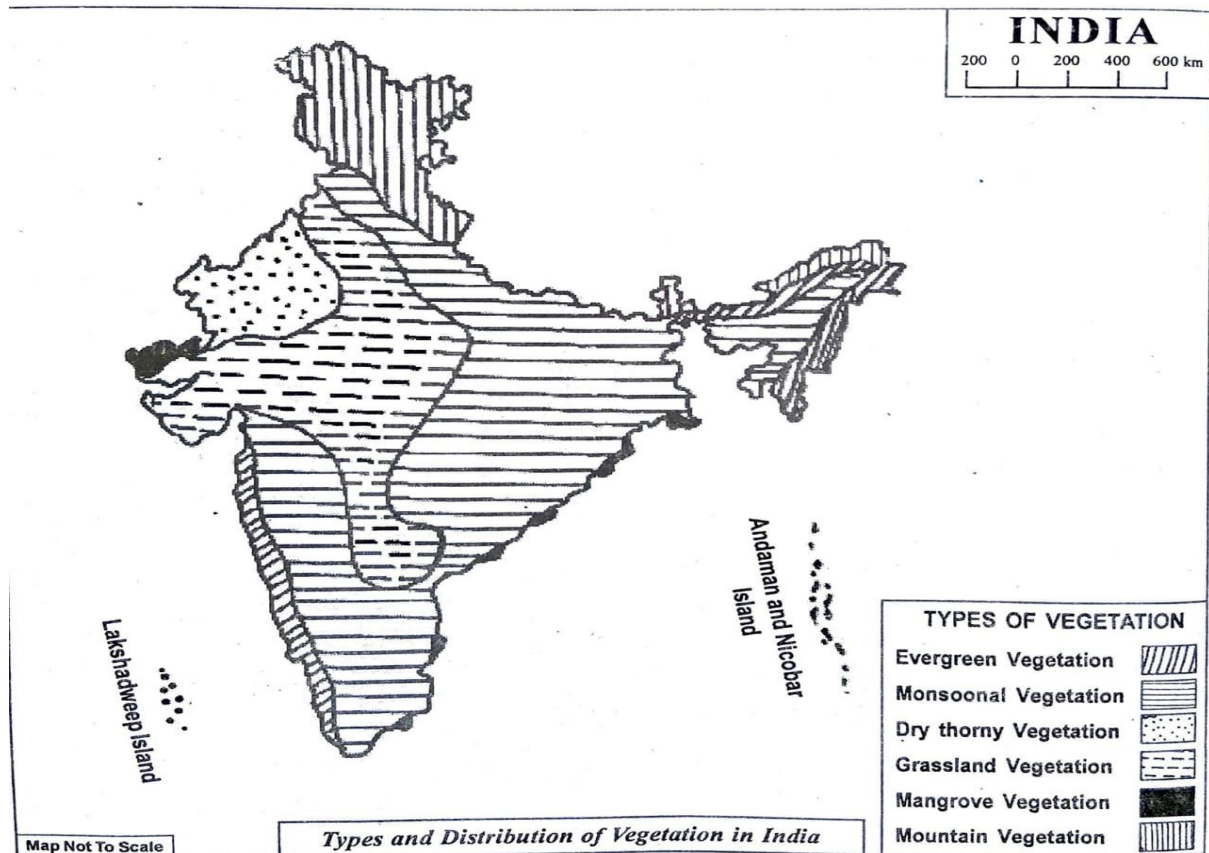
(i) Evergreen vegetation : Evergreen vegetation is found in regions having an average annual rainfall of more than 200 cm and temperature between 25°C and 27°C. The trees of evergreen forests are characterised by great height upto 45 m. Besides tall trees, cane, bamboo, ferns and various kinds of creepers are commonly seen here. The leaves of these trees do

not shed in any part of the year. Hence, these are called evergreen forests. The valuable trees of this type of forests are sisum, sandal, rubber, etc. Evergreen forests are found in the western slopes of the western ghats, Himalayan foothills of Arunachal Pradesh, Upper Assam region, hills of Manipur and Mizoram and in the Andaman islands.

(ii) Monsoonal vegetation : The most prevalent type of vegetation found in India is the monsoonal vegetation. This type of vegetation is found in regions having an average annual rainfall between 100 cm and 200 cm and temperature of around 27°C. Most trees of this type shed their leaves in winter as the rainfall and temperature decrease and the soil becomes dry in winter. The important trees of monsoonal forests are sal, teak, siris, sisu, simul and varieties of bamboo, etc. This type of forests are found in Assam, west Bengal, Bihar, Uttar Pradesh, some parts of Haryana, Madhya Pradesh, Tamil Nadu, western ghats, eastern ghats and the eastern parts of the Deccan plateau, humid areas of the south Indian states, the Andaman and Nicobar Islands, etc.

(iii) Dry thorny vegetation : Dry thorny vegetations grows in the regions where average annual rainfall is less than 50 cm and temperature is normally high. Since the soil is sandy and water content in soil is less, the trees have thorny leaves to check evapo-transpiration. The western part of the Thar desert of Rajasthan and south-western parts of Punjab have this type of vegetation. The major trees of drylands and desert

regions include acacia, different varieties of cactus, date palm, etc.



(iv) Grassland vegetation: Extensive grasslands like Prairie of North America and Savanna of Africa are not found in India. However, small grasslands having short grasses and thorny bushes are found in areas having an average annual rainfall between 50 cm and 100 cm. Such grasslands are found in Punjab, eastern part of Rajasthan, plains of Uttar Pradesh, central parts of Andhra Pradesh, Karnataka and some parts of Maharashtra. Vegetation such as thatch, cane, reed, etc. can also be found in the wet and waterlogged areas of the Terai region of the Himalayan foothills. Some of the trees grown in this region are khair, simul, etc.

(v) Mangrove vegetation: Mangrove vegetation is found in the coastal Delta regions. The vegetation is supported by the salty sea water, the sediments carried and deposited by tides and the river. This type of vegetation is found mainly in the coastal areas of the Gulf of Kutch, Sundarbans of west Bengal (the delta regions of the Ganga-Brahmaputra), in the delta regions of the Godavari, Krishna and Kaveri rivers. The main trees found in this region are sundari, date, palm, coconut and bushy plants.

(vi) Mountain vegetation: Hilltops and mountains have different types of vegetation. There are varieties of vegetation at different heights of the mountains due to variations in rainfall, temperature, soil quality, etc. The Himalayan foothills having an average elevation of 1,000 m are covered with thick monsoonal forests, which include bamboos, sal and other valuable trees, etc. To the north of the monsoonal forests, evergreen trees like oak and coniferous trees are seen which are found between 1,000m and 2,000m. Such forests are found in the Himalayan regions of Kashmir, Himachal Pradesh, Uttarakhand, North-eastern hilly regions, etc. In Darjeeling and Sikkim, at the altitudes between 1600 m and 3000m, many varieties of coniferous trees, viz. deodar, etc. are found. Beyond this elevation, the regions have alpine types of forests.

**Q.15: What are the characteristics of the evergreen vegetation of India ?**

**Ans:** Refer to answer of question no.14 [point no.(i)]

Q.16: Write about the characteristics of the mountain vegetation of India.

Ans: Refer to answer of question no. 14 [point no.(vi)]

Q.17: What are the different types of migration ?

Ans: The different types of migration are :

(i) Internal migration: When migration takes place within a country, it is called internal migration. It can be further classified as :

(a) Inter-state migration: Migration which takes place among the states of the country.

(b) Intra-state migration: Migration which takes place among the districts or regions of a state.

(ii) International or external migration: When migration takes place from one country to another, it is called international or external migration.

Q.19: What are the impacts of migration in India ?

Ans: The impact of migration in India is as follows :

(i) Growth of diversified cultures due to variations in communities, religions and languages of the immigrants.

(ii) Advancement of the economic sector and of trade and commerce.

(iii) Change in the demographic structure,i.e. population growth,density of population and literacy rate of a region.

(iv) Increased pressure on land,thereby affecting forest and wetland ecosystem.

(v) Rise of serious social,religious and economic problems.

(vi) Growth of slums in the urban areas leading to unhygienic conditions and pollution and the urban environment.

(vii) Change in the political situation of the country and/or of states.

(viii) Added population pressure has created problems in health, education and employment sectors.

(ix) Sometimes problems related to language,religion,culture and economy arise, especially in areas where number of migrants outnumber the indigenous people.

**Q.20: Write down the main features of Indian economy.**

**Ans:** The main features of Indian economy are :

(i) Low per capita income : Per capita income is the result of total income divided by total population,i.e. the average annual income of a person. The per capita

income of India in 2008-09 was ₹ 31,801 and in 2009-10 it was ₹ 33,731, i.e. recording an increase of ₹ 1930. Such an increase in per capita income is very low. The per capita income is very low compared to the expenditure of a person on basic needs. As a result, the volume of investment has decreased and no development activity could take place.

(ii) High population : The population of India was 350 million in 1947 which has increased to 1210 million in 2011. Such a rapid growth of population has increased the volume of output but the output is swallowed up by the increased population, thereby leading to problems of food, clothing and shelter.

(iii) Poverty: One-third of the total poor people in the world lives in India. According to the census of 2011, 30 crore people in India are poor, out of which 22 crore live in villages and the rest in urban areas.

(iv) Agriculture: The majority of the population of India depends on the agricultural sector. As per the census of 1951, 70% of the total population of India was engaged in this sector. With the expansion of sectors like industry, commerce, etc., this figure has fallen down to 60% in 2011.

(v) Unemployment: The high growth of population has created the problem of mass unemployment in India. India is facing a large and growing volume of unemployment in urban areas and disguised employment in rural areas. Too many persons are

employed in agriculture sector, whose marginal productivity is zero. Such persons who are only superficially employed are dragging the development of the country downward.

(vi) Planning based development: The five year plans have been developed in the country since 1951 for the overall development of the country. Efforts have been made to solve the social, educational and economical problems of the country through economic planning.

**Q.21: What are the union territories of India ?**

Ans: The seven union territories of India are :

1. Delhi, (now has a special status of National Capital Territory)
2. Andaman and Nicobar Islands,
3. Chandigarh
4. Dadra and Nagar Haveli,
5. Daman and Diu,
6. Puducherry

**Q.22: How many states are there in India at present and name those.**

Ans: There are 29 states in India at present. They are :

1. Andhra Pradesh
2. Arunachal Pradesh.
3. Assam
4. Bihar
5. Chhatisgarh
6. Goa
7. Gujara
8. Haryana
9. Himachal Pradesh
10. Jammu and Kashmir
11. Jharkhand
12. Karnataka
13. Kerala
14. Madhya Pradesh
15. Maharashtra.
16. Manipur

17. Meghalay

18. Mizoram

19. Nagaland

20. Odisha

21. Punjab

22. Rajasthan

23. Sikkim

24. Tamil Nadu

25. Telangana

26. Tripura

27. Uttar Pradesh

28. Uttarakhand

29. West Bengal

**Q.23: Name the latest state formed in India. Write the area and population of it.**

**Ans:.** The latest state formed in India is Telengana. The area of Telengana is 1,14,840 sq km (approx.) and its population is 3,52,86,757 (approx.).